

CLAIMS

We claim:

1. A method for dynamically updating descriptions of audio-visual content
 5 information, comprising the steps of:
 - a) issuing a command indicating the type of update;
 - b) specifying the location in said description to perform said update,
 wherein said description is substantially compliant with the MPEG-7 standard; and
 - c) updating said description.
- 10 2. The method of Claim 1 further comprising the step of:
 - d) determining whether said update is authorized to be performed.
3. The method of Claim 1 wherein said step a) comprises the step of:
 - 15 a1) issuing a command to add to said description.
4. The method of Claim 1 wherein said step a) comprises the step of:
 - a1) issuing a command to delete a portion of said description.
- 20 5. The method of Claim 1 wherein said step a) comprises the step of:
 - a1) issuing a command to change a portion of said description.
6. The method of Claim 1 wherein said step c) comprises the step of:
 - c1) altering the structure of said description.

7. The method of Claim 1 wherein said step c) comprises the step of:
c1) altering a parameter at a node of said description.

5 8. The method of Claim 1 wherein said step a) comprises the step of:
a1) issuing a derive by restriction command.

9. The method of Claim 1 wherein said step a) comprises the step of:
a1) issuing a derive by extension command.

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10. The method of Claim 1 further comprising the step of:
d) transferring data to be added to said description.

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11. In a system comprising a first computer system and a second computer
system coupled to said first computer system via a communication link and having
stored thereon a description of audio-visual content that is formatted substantially
compliant with the MPEG-7 standard, a method for dynamically updating said
description, comprising:

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a) said first computer system instructing said second computer system to
perform a specified update to said description;

b) said first computer system sending a location in said description for said
update to said second computer system; and

c) said second computer system updating said description.

12. The method of Claim 11 further comprising the step of:

d) said first computer determining whether said update is authorized to be performed.

5 13. The method of Claim 11 further comprising the step of:

d) said second computer system determining whether said first computer system is authorized to instruct said update.

14. The method of Claim 11 wherein said step a) comprises the step of:

10 a1) issuing a command to add to said description.

15. The method of Claim 11 wherein said step a) comprises the step of:

a1) issuing a command to delete a portion of said description.

16. The method of Claim 11 wherein said step a) comprises the step of:

a1) issuing a command to change a portion of said description.

17. The method of Claim 11 wherein said step c) comprises the step of:

c1) altering a schema of said description, wherein said description

20 comprises a tree structure and said update modifies the tree-structure.

18. The method of Claim 11 wherein said step c) comprises the step of:

c1) altering instance information, wherein said description comprises a tree structure and said update modifies a parameter at a node of the tree-structure.

19. The method of Claim 11 further comprising the step of:

d) selecting among a set data stored on said first computer to update said description on said second computer.

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20. The method of Claim 11 wherein said first and said second computer systems form a peer-to-peer system.

21. The method of Claim 11 wherein said step a) comprises the step of:

10 a1) receiving a request from said second computer for information, wherein a pull operation is initiated.

22. The method of Claim 11 wherein said step a) comprises the step of:

15 a1) determining that said description stored on said second computer should be updated, wherein a push operation is initiated.

23. A computer readable medium residing on a first computer system having instructions stored thereon for causing a processor of said first computer system to instruct a processor of a second computer system to dynamically update an
20 MPEG-7 audio-visual content description residing on said second computer system, said instructions comprising:

a command structure for specifying the update for said description; and

a location structure for specifying a location in said description to perform said update.

24. The computer-readable medium of Claim 23 wherein said command structure further specifies a command selected from the group consisting of add, delete, and change commands.

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25. The computer-readable medium of Claim 23 wherein said location further specifies between a relative address in said description and an absolute address in said description.

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26. The computer-readable medium of Claim 23 wherein said instructions further comprise a structure defining data to be added to said description.

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27. The computer-readable medium of Claim 23 wherein said instructions further comprise a structure for specifying a security level to determine whether said update is allowed.

28. The computer-readable medium of Claim 23 wherein said instructions are substantially compliant with the Extensible Markup Language (XML).